INSTRUCTIONS

-J03708 REV 4-20-2005

Kit Numbers 42035-06

CHROME REAR BRAKE CALIPER KIT

General

This Chrome Rear Caliper kit is designed to fit 2006 and later Dyna model motorcycles.

NOTE

The rear brake caliper in this kit (Part No. 42036-06) installs the same way as the original-equipment rear brake caliper.

The brake pads and pad pins are not included with this kit. If it is necessary to replace worn or damaged brake pads and pad pins, they can be purchased separately from any Harley Davidson dealer.

See the Service Parts illustration for kit contents and service parts.

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

NOTE

This instruction sheet references Service Manual information. A Service Manual for your model motorcycle is available for purchase at a Harley Davidson dealer.

Installation

Prepare the Motorcycle for Service

⚠WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (–) battery cable before proceeding. (0048a)

1. Follow the Service Manual instructions to disconnect the battery cables, negative (–) cable first.
2. Follow the Service Manual instructions to remove debris deflector from motorcycle.
3. Follow the Service Manual instructions to disconnect and remove exhaust pipes from motorcycle.

Remove Rear Brake Caliper

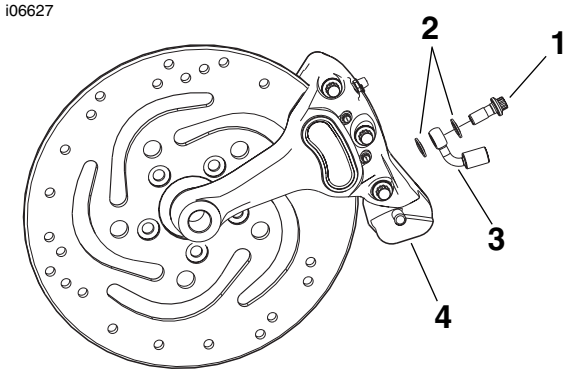
⚠WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

NOTE

Place a container under the brake caliper to catch brake fluid released when removing the brake line from the caliper.

1. See Figure 1. Remove the banjo bolt (1) and both steel/rubber washers (2) to detach rear brake line (3) from caliper. Save banjo bolt for reuse and discard washers.
3. Pull axle from rear wheel. Follow Service Manual instructions for Rear Wheel Removal procedure.
4. Lift rear caliper away from axle and rear fork. Notch (4) in caliper mount must clear tab on rear fork.
5. Remove bridge bolts from caliper assembly and discard.
6. Remove pad pins and brake pads from caliper and save for future installation on new chrome caliper.



1. Banjo bolt
2. Steel/rubber washer (2)
3. Brake line
4. Caliper notch

Figure 1. Rear Caliper Removal

Inspect Pad and Pins

1. Inspect the brake pads. If brake pad is worn to 1/16 in. (1.6 mm) or less, replace the set. Follow the instructions in the Service Manual.
2. Inspect pad pins for wear and grooving. If wear is more than 0.015 in. (0.38 mm), replace both pins.

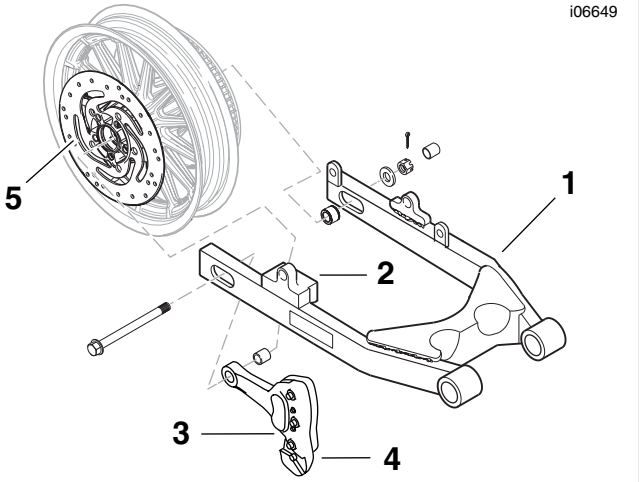
3. Inspect the brake disc and, if necessary, follow the instructions in the Service Manual to replace the brake disc.

Install the Chrome Rear Brake Caliper

NOTE

Pay close attention to all warnings, cautions, and torque specifications in this instruction sheet and in the service manual when installing this rear brake caliper.

1. See Figure 2. Position the caliper (3) between the brake disc (5) and the rear fork (1). The weldment (2) on the fork should fit between the notch and rubber bumper (4) on the caliper. Verify that the full length of the rubber bumper contacts the underside of the weldment.



1. Rear fork
2. Weldment
3. Rear brake caliper
4. Notch and rubber bumper
5. Rear brake disc

Figure 2. Rear Wheel, Axle, and Caliper Assembly

NOTE

Apply isopropyl alcohol to the rubber bumper for ease of installation.

3. Following the instructions in the Service Manual, install the rear axle and check drive belt tension.

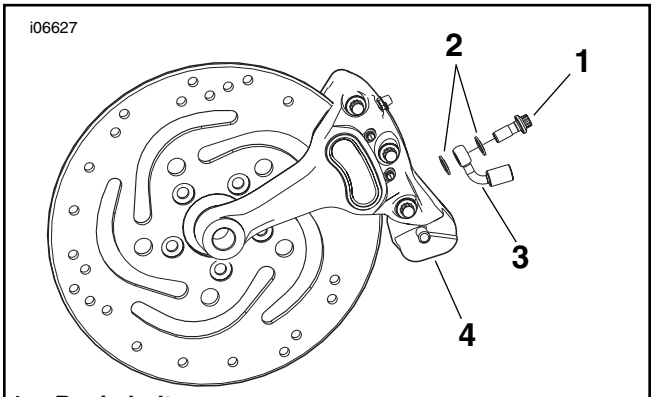
CAUTION

Avoid leakage. Be sure gaskets, banjo bolts(s), brake-line and caliper bore are clean and undamaged before assembly. (0032a)

NOTE

To prevent brake fluid loss, do not re-use the steel/rubber gaskets removed with the banjo bolt. Install the brake caliper using the new steel/rubber gaskets provided in this kit.

4. See Figure 3. Lubricate the new steel/rubber washers (2) with the grade of brake fluid that will be used to fill reservoir. Connect the rear brake line (3) to the caliper using banjo bolt (1) and two new washers (2). Torque the banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).



1. Banjo bolt
2. Steel/rubber washer (2)
3. Brake line
4. Caliper notch

Figure 3. Brake line Component Installation

5. If necessary, follow the instructions in the Service Manual to install new brake pads

6. If necessary install new pad pins. Listen for the audible click when installing and tighten to 180-200 **in-lbs** (20-23 Nm).

Bleed the Brakes

⚠CAUTION

Direct contact of D.O.T. 4 brake fluid with eyes can cause irritation. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of D.O.T. 4 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. KEEP OUT OF REACH OF CHILDREN. (00240a)

NOTE

Hydraulic brake fluid bladder-type pressure equipment can be used to fill the brake master cylinder through the bleeder valve. Remove the master cylinder reservoir cover to prevent the system from pressurizing. Do not use pressure-bleeding equipment when the hydraulic system is sealed with the master cylinder reservoir cover and gasket in place.

1. Remove the cover and gasket from the rear brake master cylinder reservoir.

⚠WARNING

Be sure that no lubricant gets on rear tire, wheel or brakes when changing fluid. Traction can be adversely affected which could result in loss of control of the motorcycle and death or serious injury. (00047b)

2. Fill reservoir with the grade of brake fluid specified in the Service Manual.

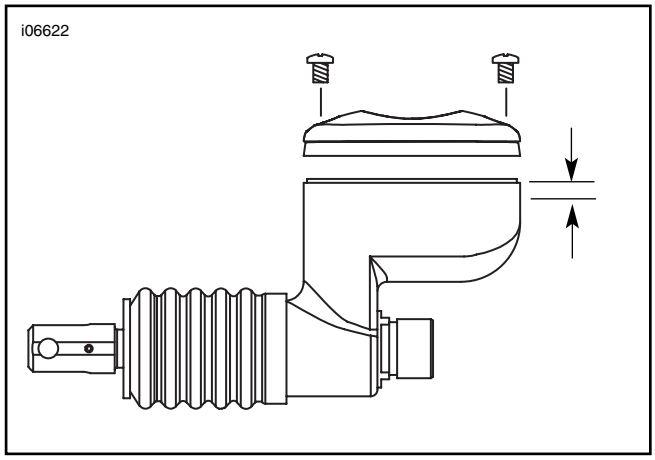


Figure 4. Fill 1/8 in. (3.2 mm) below Reservoir Gasket Surface

a. See Figure 4. Verify that fluid level is 1/8 in. (3.2 mm) below the gasket surface of the reservoir with the master cylinder in a level position.

NOTE

Do not mix grades of brake fluid. Different grades of brake fluid are not compatible. Mixing them can cause equipment damage.

3. Remove the bleeder valve cap and attach a tight-fitting flexible hose to the tip of the bleeder valve. Direct the end of the hose into a container.
4. Press the brake pedal to apply hydraulic pressure to the brake system.
5. Open the bleeder valve about 1/2 turn counterclockwise. When the brake pedal has been fully depressed, close the bleeder valve (turn clockwise). Allow the brake pedal to return to its released position.
6. Repeat until all air bubbles are purged from brake line.
7. Torque the bleeder valve to 80-100 **in-lbs** (9.0-11.3 Nm) and install the bleeder valve cap.
8. Verify master cylinder fluid level. Fill reservoir 1/8 in. (3.2 mm) below gasket surface.
9. Install the gasket and cover on the rear brake master cylinder reservoir. Tighten cover screws to 6-8 **in-lbs** (0.7-0.9 Nm).

Install the Exhaust

If the exhaust system was removed to access the rear axle, refer to the Service Manual for installation.

Install the Belt Guard and Debris Deflector

Follow the instructions in the Service Manual to reinstall the belt guard and debris deflector.

Return the Motorcycle to Service

⚠WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

1. Connect battery cable to battery, positive cable first.
2. Follow the instructions in the Service Manual to install the seat.

⚠WARNING

After installing seat, pull upward on front of seat to be sure it is in locked position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070a)

Test the Brakes

1. Turn the ignition switch ON.

⚠WARNING

Be sure that all lights and switches operate properly before operating motorcycle. Low visibility of rider can result in death or serious injury. (00316a)

2. Pump the brake lever to verify operation of the stop lamp.

⚠WARNING

After servicing brakes and before moving motorcycle, test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury. (00289a)

3. Test ride the motorcycle at low speed. If the brake feels spongy, bleed the brake system again.

NOTE

Avoid making hard stops for the first 100 miles (160 km). This allows the pads to become conditioned to the brake discs.

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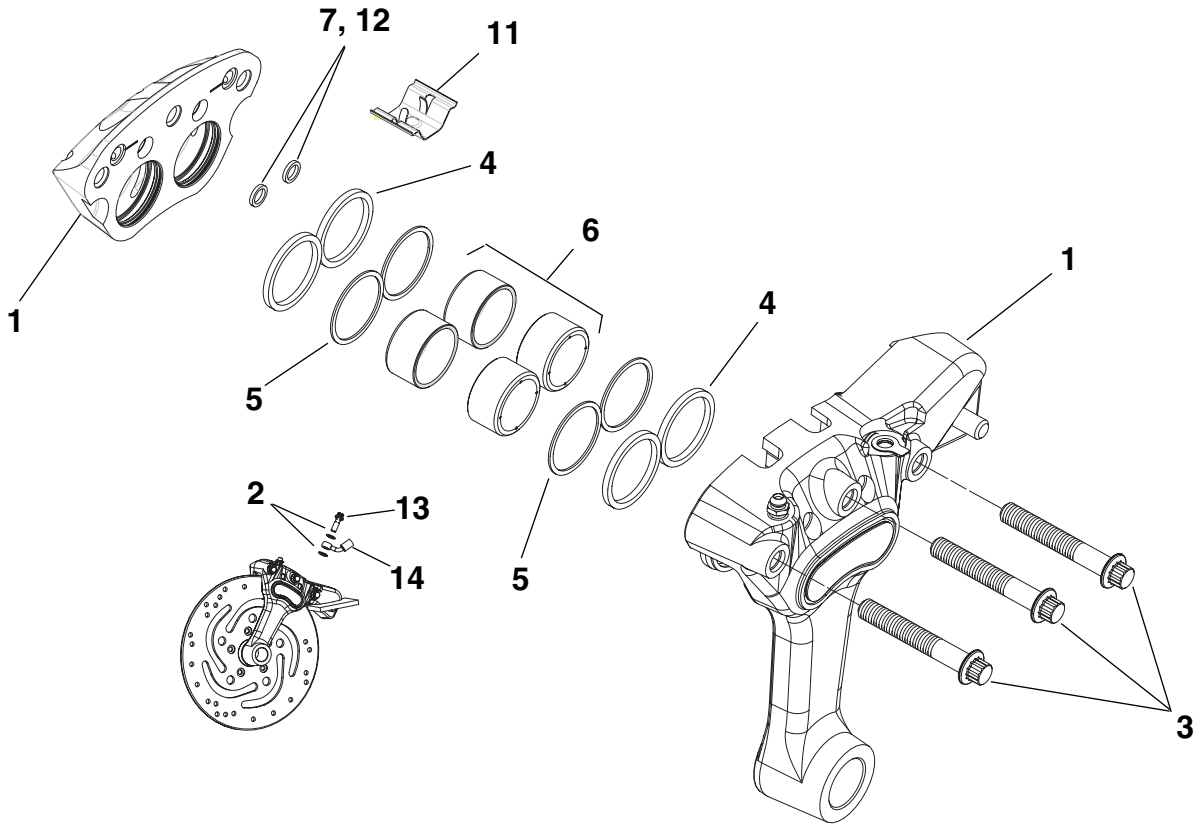

Item	Description (Quantity)	Part Number
1	Chrome caliper assembly	Not sold separately*
2	Steel/rubber brake line gasket (2)	41731-01
3	Bridge bolt (3)	44193-02
Piston Kit		44313-01**
4	Square seal (4)	Not sold separately**
5	Piston wiper (4)	Not sold separately
6	Piston (4)	Not sold separately
7	Crossover O-ring (2)	Not sold separately**
Pad Kit (Not shown)		44082-00A
8	Brake pad and holder, inner	Not sold separately
9	Brake pad and holder, outer	Not sold separately
Pad Pin Kit (Not shown)		44314-00 (black) / 44324-02 (silver)
10	Pad pin (2)	Not sold separately
Anti-Rattle Spring Kit		44337-00B
11	Anti-rattle spring	Not sold separately
12	Crossover O-ring (2)	Not sold separately**
Parts not in Kit:		
13	Banjo bolt	Reference only
14	Brake line	Reference only

* Chrome caliper is an assembly of caliper halves, pistons, seals and wipers, bridge bolts, bleeder valve, rubber bumper, crossover O-rings and anti-rattle spring. Pins and brake pads can be purchased separatety (See above).

** Piston wipers, seals and crossover O-rings are only available in a separate Seal Kit (Part No. 44315-00).